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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,731

04/26/2005

Serge Auvin

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6471

47888 7590 06/13/2008
HEDMAN & COSTIGAN P.C.
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EXAMINER

HABTE, KAHSAI

ART UNIT

PAPER NUMBER

1624

MAIL DATE

DELIVERY MODE

06/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Allowability

Application No.

10/532,731

Examiner

Kahsay T. Habte

Applicant(s)

AUVIN ET AL.

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 06/04/2008.
2. ☒ The allowed claim(s) is/are 1-4.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Charles Muserlian on June 5, 2008. Enter the following:

Replace claims 3-4 in the claim set (06/04/2008) with

~~Claim 3 (previously presented)~~ A compound of claim 1, wherein

❖ ~~R¹, R², R⁶, R⁵ and R⁶ are independently selected from the group consisting of hydrogen, alkyl and alkoxy;~~

--

❖ R³ is hydrogen or methyl;

❖ W is -O- or -S-;

❖ X is -Y-CO- or -O-Y-CO-;

❖ -(AA)_n- is an -(AA²)-(AA¹)- such that AA¹ is Leu and AA² is an amino acid chosen from the group consisting of natural amino acids, 3-methylvaline, norvaline, phenylglycine, vinylglycine and 2-aminobutyric acid;

❖ R is hydrogen,

or a salt thereof.

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Claim 4 (previously presented) A compound of claim 1 is selected from the group consisting of:



- N-(10H-phenothiazin-2-ylcarbonyl)-L-leucyl-L-leucyl-N¹ [(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10H-phenothiazin-2-ylcarbonyl)-L-leucyl-L-leucyl-N¹ [(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10H-phenothiazin-2-ylcarbonyl)glycyl-N¹ [(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10H-phenothiazin-2-ylcarbonyl)leucyl N¹ [(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N⁶-[(benzyloxy)carbonyl]-N²-(10H-phenothiazin-2-ylcarbonyl)lysyl-N¹ [(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- 1-(10H-phenothiazin-2-ylcarbonyl)-L-prolyl N¹ [(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;

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- N-(10H-phenothiazin-2-ylcarbonyl)glycyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10H-phenothiazin-2-ylcarbonyl)leucyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-alanyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-valyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-β-alanyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-methyl-N-[(10H-phenothiazin-2-yloxy)acetyl]glycyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-D-valyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- 3-methyl-N-[(10H-phenothiazin-2-yloxy)acetyl]-L-valyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-N²-[(2S)-2-[(10H-phenothiazin-2-yloxy)acetyl]amino)butanoyl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-norvalyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-iseryl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-threonyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N¹[(3S)-2-methoxytetrahydrofuran-3-yl]-N²-[(2S)-2-[(10H-phenothiazin-2-yloxy)acetyl]amino)-2-phenylethanoyl]-L-leucinamide;
- N¹[(3S)-2-methoxytetrahydrofuran-3-yl]-N²-[(2S)-2-[(10H-phenothiazin-2-yloxy)acetyl]amino)but-3-enoyl]-L-leucinamide;

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- 2-methyl-N-[(10H-phenothiazin-2-yloxy)acetyl]alanyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N⁶-[(benzyloxy)carbonyl]-N²-(10H-phenothiazin-2-ylcarbonyl)lysyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- 1-(10H-phenothiazin-2-ylcarbonyl)-L-prolyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10H-phenothiazin-2-ylcarbonyl)leucyl-N¹-[(3S)-2-(acetyloxy)tetrahydrofuran-3-yl]-L-leucinamide;
- N²-(10H-phenothiazin-2-ylcarbonyl)lysyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10H-phenothiazin-2-ylacetyl)-L-leucyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- O-(tert-butyl)-N-(10H-phenothiazin-2-ylacetyl)-L-seryl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10H-phenothiazin-2-ylacetyl)-L-alanyl-3-cyclohexyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-alaninamide;
- N-(10H-phenothiazin-2-ylacetyl)-L-leucyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- O-(tert-butyl)-N-(10H-phenothiazin-2-ylacetyl)-L-seryl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10H-phenothiazin-2-ylacetyl)-L-alanyl-3-cyclohexyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-alaninamide;
- N-[3-(10H-phenothiazin-2-yl)propanoyl]-L-leucyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[3-(10H-phenothiazin-2-yl)propanoyl]-L-leucyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-leucyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-glycyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;

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- N-[(10H-phenothiazin-2-yloxy)acetyl]-glycyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-valinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-glycyl-3-cyclohexyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-alaninamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-glycyl-N-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-phenylalaninamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-glycyl-N²-isobutyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-glycinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-leucyl-N²-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-glycyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-alanyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-valyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-β-alanyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-methyl-N-[(10H-phenothiazin-2-yloxy)acetyl]-glycyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-D-valyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- 3-methyl-N-[(10H-phenothiazin-2-yloxy)acetyl]-L-valyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-N²-[(2S)-2-[(10H-phenothiazin-2-yloxy)acetyl]amino}butanoyl)-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-norvalyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]-L-seryl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;

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- N-[(10H-phenothiazin-2-yloxy)acetyl]-1-thienonyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-N²-[(2S)-2-[(10H-phenothiazin-2-yloxy)acetyl]amino)-7-phenylethanoyl]-L-leucinamide;
- N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-N²-[(2S)-2-[(10H-phenothiazin-2-yloxy)acetyl]amino)but-3-enoyl]-L-leucinamide;
- 2-methyl-N-[(10H-phenothiazin-2-yloxy)acetyl]alanyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]glycyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-valinamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]glycyl-3-cyclohexyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-alaninamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]glycyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-phenylalaninamide;
- N-[(10H-phenothiazin-2-yloxy)acetyl]glycyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-N²-isobutylglycinamide;
- N-[2-methyl-2-(10H-phenothiazin-2-yloxy)propanoyl]glycyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[2-methyl-2-(10H-phenothiazin-2-yloxy)propanoyl]glycyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10,11-dihydro-5H-dibenzo[b,f]azepin-3-ylcarbonyl)-L-leucyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- N-(10,11-dihydro-5H-dibenzo[b,f]azepin-3-ylcarbonyl)-L-leucyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide;
- N-[(S-acetyl-10,11-dihydro-5H-dibenzo[b,f]azepin-3-yl)carbonyl]-L-leucyl-N¹-[(3S)-2-methoxytetrahydrofuran-3-yl]-L-leucinamide;
- 2-methyl-N-[(10H-phenothiazin-2-yloxy)acetyl]alanyl-N¹-[(3S)-2-hydroxytetrahydrofuran-3-yl]-L-leucinamide and/or a salt thereof.

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Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kahsay Habte whose telephone number is (571) 272-0667. The examiner can normally be reached on M-F (9.00AM- 5:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached at (571) 272-0661. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Kahsay T. Habte/
Primary Examiner, Art Unit 1624

June 13, 2008

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